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# Have You Seen Faces Among the Pines?

Have you ever thought of a pine tree having a face? Fact is, some may have two faces.

Of course that's nothing new to you folks who live in areas where there are tall and stately pine trees.

Perhaps they were not faces to you. Maybe to the casual observer they were merely bald spots where someone had chopped off part of the bark on the pine trees. How many faces in a crop?

We'll come back to that. Meanwhile, here's something else to think about:

With hack and squeeze bottle, spiral gutters and two-headed nails, the plastic surgeons of the forest chip and scrape those faces. That's how we get gum naval stores—maybe they're turpentine and rosin to you—the oldest segment of the \$100 million naval stores industry.

Centuries ago, the naval stores industry got its name by supplying tars and pitches for calking ships and treating the rigging of wooden sailing vessels. But the industry has changed with the times. Today's soap operas, advertising a new liquid detergent containing a naval stores product, keep the industry and the people who run it optimistic and young at heart. The



industry has come full circle from an old tar's quarters to my lady's dressing table.

End-uses of naval stores are part of modern living. You walk on colorful linoleum, enjoy the sheen of polishes, waxes, and varnishes, relax as the rubber tires on your car smooth out the road ahead and appreciate the protection and the glow of paints—all because of this industry. The paper on which this story is printed contains rosin and your insecticide may include a product from naval stores.

#### Turpentine and Rosin

In the colonial period, turpentine was considered the major product, rosin only a by-product. Times changed and rosin has been the No. 1 industry product for the past several decades. A promising outlet fades, in time, but research—imagination in a test tube—gives rise to hope for the future.

Not too long ago, paint was the primary end-use of turpentine. On-thejob painters still use large quantities, but in recent years it has become an important chemical starting material in making resins, insecticides, synthetic pine oil, camphor, and other products.

There was a time, also, when the principal use of rosin was to make yellow laundry soap. Today its major uses are in "sizing" or impregnating various types of paper and paperboard, in chemicals, and in providing protective coatings, such as varnishes, enamels, and paints. Soap now accounts for only a small part of total rosin consumption.

But change isn't limited to use. A continuing revolution has been in progress in production methods and sources for the past 2 to 3 decades.

Have you figured out yet how many faces in a crop? No? Well, the story

of that revolution will give you a clue to the answer.

In the gum naval stores industry—an agricultural operation—living trees are systematically chipped or streaked at regular intervals. To seal and heal the wound, the trees exude gum, which is channeled into cups attached to the trees. Turpentine and the rosin are separated by distillation.

When vast areas of virgin pine trees were available, production of gum naval stores provided an excellent outlet for surplus labor. Every tree had to be chipped each week. The repeated chippings, each cut above the previous one, formed the "face." Virgin and yearling refer to first and second year operations. A dry face is one that fails to produce gum.

The gum was gathered about every 3 weeks and a tremendous amount of hand labor was required. Simple hand tools, two-wheeled carts, a wood-fired still, homemade containers and "furnishings" were the other necessities. Streaks on the trees were deep and gum was caught in "boxes" cut at the base of the faces.

Almost every operator processed his own gum in a fire still and sold turpentine and rosin. The quality produced by 2,000-odd stills was variable, packaging was poor, and trees were damaged by the boxes and deep streaks.

#### Second Growth

As the stands of virgin forests were cut over and second growth trees worked, the number and width of streaks were reduced and cups attached to catch the gum. This was a major break from the past. Change again.

In the past 20 years, the gum industry has been revolutionized. Research led the way to the development of modern central distillation plants with

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gum-cleaning equipment. Producers now sell gum to around 20 central stills. Products and packaging have been standardized.

With these changes have come bark chipping and acid treatment of the streaks. This continues the flow of gum at least 2 weeks. One worker can now chip twice as many trees as before. Furthermore, bark chipping leaves the trees unimpaired.

#### Gum and Steam Rosin

Gum rosin production is down to around 400,000 drums annually. Competition began to be felt in the late 1920's when production of steam-distilled rosin exceeded 300,000 drums. This segment of the industry utilized the tremendous supply of resin-saturated pine stumps and wood left on cut-over land. The wood, obtained cheaply or merely in exchange for the removal of stumps from a field, was moved to central plants where naval stores products were extracted by solvents and separated and refined by steam distillation.

Large laboratories working around the clock succeeded in improving products and developing new outlets. Here, now, are mechanized naval stores from in-the-way stumps and wood.

Production of steam-distilled rosin rose steadily to a high of 1,369,000 drums in 1955. It has dropped slightly since. The supply of virgin pine stumps is being exhausted and plants are moving to outlying areas, but significant production is expected to continue for the next few years.

In the last decade or so, the production of paper from southern pines has grown by leaps and bounds. In processing the wood pulp, the turpentine in the wood is volatilized and condensed and the resin saponified, coagulated, and skimmed off. At first these byproducts were used only as fuel, for the turpentine had an objectionable odor.

But test tubes changed all this. Pulp wood is now the leading source of turpentine and the resins and oils are used to make tall oil rosin and other useful products. Production of tall oil rosin reached 270,000 drums in 1957. It may reach 500,000 a year.

Yes, the "old order changeth" in naval stores. First, hand labor gum naval stores, then mechanized steam distilled production, now byproducts naval stores. Does this complete the cycle and do we start over again? The answer is in the test tube.

At present, adaptable naval stores products may be facing another revolutionary change in consumption. Pine oil—a natural product of the steam distilling industry and also produced synthetically from turpentine—is an important ingredient of a new liquid detergent. TV advertising, naturally enough, proclaims its virtues.

Detergents are big business and this new product could divert turpentine from its established uses to the production of synthetic pine oil. If that happens, soap would again be a major outlet for naval stores. But this time turpentine would be used instead of rosin.

Change again. The naval stores industry would be lost without it.

One thing is sure. Research has taken some of the toil out of the industry and it may bring new faces in the future.

How many faces are there in a crop? There are 10,000. That's the number the average family can work during a year.

> John J. Morgan Agricultural Estimates Division, AMS

# **Naval Stores Reports**

Reports on naval stores are released regularly by the Crop Reporting Board.

Statistics on production and production plant stocks of turpentine, rosin and miscellaneous products are released monthly. Tall oil rosin data are issued quarterly. The annual report includes consumption and stocks at other locations.

Naval stores operators—like crop reporters—are voluntary cooperators. Naval stores reports are made directly to Washington, D. C. rather than to the respective State Statisticians.

# "Bert" Newell's

What strange tricks vanity will sometimes play with memory. Not long ago my wife and I were regretting that some 25 years ago we didn't buy a certain building lot for what now appears to be a very low price.

In trying to protect my vanity and excuse myself for the mistake I began to "remember" a lot of later developments that were not actually in the picture at that time but seem very clear now. We finally felt better when we quit trying to find excuses and admitted to ourselves we had just made a mistake and let it go at that.

No one likes to make mistakes but when one is made there is a tendency to think back and try to figure out why. Here it is necessary to be very careful because it is just human nature to look for an excuse as we did or find something, or someone, to blame.

In our work we run into this problem from several different angles. For example, every once in a while someone blasts a crop forecast or a prediction in a situation report. These criticisms are almost always based on analyses made after the fact. We can make much better analyses after the fact too, but that wouldn't be very much help at the time when help is really needed.

Take the case of a prediction of the yield of any crop, say corn, on August 1. We have to size up the situation with the information at hand as of that date. We know that if weather is bad the final yield will be less; and if the weather is better than average it will be more.

So we always try to make it very clear that our estimate, or forecast, is based on the assumption that weather after the date will be about normal. Who can tell what the weather will be 30 days in the future? We can't—but

still we are sometimes the goat despite our effort to make that point clear.

Another thing to consider in using the crop report is the fact that sometimes the report itself will have an effect on the final outturn. The most obvious of such reports are the ones that give farmers' intentions to plant, or to breed sows for farrowing in some future period.

The main object of these reports is to give the farmer a chance to change his plans if it appears wise to do so. We try to make this point very clear in all such reports but still, once in awhile, someone forgets that and blames their condition on what they term an error in the estimate.

A month or so ago, Harold Breimyer, in an article in this publication, suggested that you read some of the reports written by the analysts who do the situation reports. I have said before, and I would like to emphasize it again, that that is an awfully good suggestion.

Of course, your voluntary reports provide basic information used in these analyses but there are many other factors that have to be considered so that these reports can give the whole picture. The articles you read in Agricultural Situation on crops and livestock and prices can be invaluable guides to you in making decisions in your business. And by and large, both the crop and livestock reports and the situation reports have a pretty high batting average.

Well, I guess in the final analysis the determining factor in facts is the user. We all have to live with ourselves and sometimes that is not easy.

When we make a mistake we may be able to find an excuse and thereby save our vanity, but when we just sit down and argue it out with ourselves we will often find we are the ones really responsible. Admitting it frankly is sort of like a dose of quinine—bitter as all get out—but it does reduce the fever.

Medewell

S. R. Newell

Chairman, Crop Reporting Board, AMS

# Outlook

#### Livestock

Stockmen may expect generally favorable prices for cattle through this year, although the margin over a year earlier probably will be somewhat less than in recent months. Supplies of fed cattle are building up, and the decline in prices this spring may be considerable. However, this decline will start from the highest level in 5 years.

Big feed supplies have strengthened demand for stockers and feeders. Seasonal price declines for these classes are expected after the spring high, but prices will stay above those of last year.

Intentions of hog producers in 10 States to farrow 6 percent more sows this spring indicate a larger seasonal decline than usual in fall hog prices. The price level is expected to remain fairly high until midsummer.

#### Dairy

Total milk output in 1958 is likely to exceed the fifth consecutive record high of 126.4 billion set in 1957 by about 1 billion pounds.

Bigger production per cow would bring about this slight increase. On March 1, the average output for milk cows was 3 percent higher than in 1957 and 22 percent higher than for 1947–56.

#### Eggs

Layers on hand March 1 were 4 percent fewer than a year earlier. With the U. S. flock smaller, monthly egg production probably will be below that of the comparable period in 1957 until about midyear. Farmers' prices are likely to continue strong through the spring.

# Soybeans

Farmers placed nearly 90 million bushels, or 19 percent, of the 1957 crop under support. Redemptions and deliveries can be made through May. Commodity Credit Corporation probably will acquire a sizable amount, although it expects to move much of it this summer. About two-thirds of the beans under support will be needed before the 1958 crop is available, if crushings and exports continue as large as expected.

#### Feed Grains

Despite price gains since January, the March level was substantially below a year ago. High protein feed prices advanced to near last year's level in February and early March.

#### Wheat

Some classes of "free" wheat are expected to be in short supply before the new-crop harvest. Awareness of this situation boosted prices in mid-March to their highest point to date this season.

Of the total stocks of 1,377 million bushels on January 1, about 1,000 million bushels were owned by CCC or held under support. The remaining "free" supplies would not meet requirements through midyear. Domestic requirements out of "free" old-crop supplies in the first half of 1958 are estimated at 315 million bushels. An additional 150 million bushels would be needed for export.

Increased redemptions of price support loans and sales of purchase agreement wheat will result from the price advance and increase "free" supplies.

#### **Potatoes**

Supplies are much smaller than at this time last year. Stocks of 47.4 million cwt. on March 1 were down 11.5 million. The winter crop was off 30 percent and spring production is also likely to be smaller than a year ago. Prices began an advance in early February. They are likely to continue relatively high through May.

Intended acreage for early summer harvest is 2 percent larger than last year. Producers in the late summer and fall States reported March 1 that they intended to increase acreage by 1 percent.

# GROWERS INTEND TO CUT CROP ACREAGE IN 1958

Farmers intended on March 1 to plant 271 million acres in 1958 to the 16 major spring crops which usually account for 75 to 80 percent of the crop total in this country.

This would be nearly 6 million acres less than in 1957. It would be the smallest total since 1953.

#### **Total Probable Acreage**

Making allowance for winter wheat and cotton, and approximately 41 other crops with comparatively small acreages which were not specifically reported on, it looks as though farmers are going to plant in 1958 the smallest total acreage in the 41 years that records have been available.

Best estimate for total 1958 acreage in the 59 crops planted or grown is 333 million acres. This is about 1 million acres less than in 1957. It is 20 million acres less than before the Soil Bank program began in 1956. The lowest acreage figure prior to 1957 had been 343 million acres planted in 1939.

Approximately 80,000 men and women farmers made the report on which these figures are based. Full details may be found in the annual March Intentions Report of the Crop Reporting Board of the U. S. Department of Agriculture.

Since it began in the early 1920's, the March Intentions Report has proven an excellent guide as to what farmers were likely to do in the season that lay just ahead.

Many factors, of course, enter the picture even after farmers have made their March report to the 41 field offices of the Crop Reporting Board. Weather, disease, prices—all can play a part and shape the final outcome quite differently from the plantings which the farmer expected to make.

Nonetheless, the report has proven such an accurate mirror of farmers' intentions each year that many growers take it into consideration before making their final plans. Knowing what other farmers intend to do gives them an opportunity to decide for themselves whether their original plan was good or whether they ought to make some changes.

Now take a look at prospects for some specific commodities.

#### Corn

Traditionally, corn is the Nation's largest feed grain crop. Final planting figures are still somewhat in doubt, depending, in part, on the amount of acreage growers finally put in the Soil Bank.

It appears, however, that farmers plan to plant nearly 2 percent more than in 1957. This would still be the second lowest acreage in over 60 years. Weather conditions have been generally good for corn and production should pass the 3-billion-bushel mark again.

#### Wheat

Growers planned to increase spring wheat plantings by nearly 2 percent. This was to be brought about by a 50-percent drop in durum wheat but an increase of nearly 14 percent in other spring wheat. In spite of this increase, the 1958 acreage would be the second smallest of record.

Taking into consideration transactions made with the Soil Bank and adding winter wheat acreage estimated in December 1957, total wheat acreage seemed likely to be about 57 million. This would be nearly 7 million more than in 1957.

Assuming average growing conditions, about 1.1 billion bushels may be produced in 1958, compared with about 950 million in 1957.

#### Oats

Farmers plan to cut acreage by 8 percent to the lowest total since 1940. Weather has hampered winter oats in

the South, and the Corn Belt plans a 5-percent reduction.

#### Barley

Farmers plan a 3-percent reduction. Some reasons are: Increased wheat acreage, limitation of soil-depleting crops, and the acreage reserve program, particularly for summer-fallow areas.

#### Sorghum

After a very large crop in 1957, farmers plan to curtail 1958 plantings by nearly 13 percent. Even so, this would be nearly 50 percent above the 1947–56 average. Sharp declines are expected in the Great Plains States because of excellent wheat prospects. Growers experienced difficulties in harvesting and storing the high-moisture sorghum crop last year.

#### Potatoes

Total acreage is expected to be just slightly above last year with the biggest percentage increase (2 percent) in the early summer group.

#### Soybeans

Acreage is expected to be 10 percent above last year's record. Acreage has doubled since 1948 and 1949. Production should at least equal if not exceed the 480 million bushels of 1957.

#### Rice

Growers plan to seed about 6 percent more acreage than in 1957. Even so, acreage would be 25 percent below the 1947-56 average. Allotments were practically unchanged this year but participation in the Soil Bank is less than last year. This has resulted in some intended increases. Due to upward trends in yield per acre, production should be about 45 million bags, 2 million more than in 1957.

#### Tobacco

Acreage is expected to be slightly under last year. Practically all types are under quotas and some 1958 allotments were cut below 1957, particularly fire-cured, dark air-cured, and Connecticut binder. Participation in the Soil Bank has cut acreage slightly below last year even for types in which allotments are substantially unchanged.

#### Flaxseed

Growers plan to reduce acreage because of a rather poor showing in 1957. Even so, with average yields, production in 1958 should probably reach 41 million bushels. It was 36 million in 1957.

#### Beans and Peas

An increase of nearly 6 percent is planned for dry beans. In contrast, an acreage cut of nearly 12 percent is intended for dry peas.

Some other major crops anticipate little change in acreage this year. These include peanuts with an estimated 1-percent decrease, hay with a probable 2-percent decrease, and sugar beets with a probable acreage just about equal to that of 1957.

Of course, logically, the next question would be: What is the probable total production for 1958?

Frankly, no one knows. But these are the things that afford some insight into the question: The good condition of the winter wheat crop, the ample moisture in many areas up to mid-March, the abundance of fertilizer, insecticides, farm labor, farm machinery, and know-how.

Acreage allotments are known and also expected participation in the Soil Bank. Finally, the Crop Reporting Board has ample data on the yield trends in recent years.

Taking all these things into consideration, unless yields are considerably better than the averages of recent years, total crop production in 1958 will fall somewhat below that of 1957.

Finally, the Crop Reporting Board wants to thank each and every one of you who, by reporting your March 1 intentions, made this great service to all farmers possible.

Good planting-and good luck!

Charles E. Burkhead Agricultural Estimates Division, AMS

# Short-term farm workers Increased in 1956

U. S. farmers paid wages to over 3.5 million persons for work on farms in 1956, according to Agricultural Marketing Service.

About 1.5 million of these people were hired for only a few days at harvest time (less than 25 days a year on the average). The remaining 2 million worked 25 days or more. The number of short-term seasonal workers (less than 25 days) was considerably higher than the average of 1 million for most years since 1950.

#### Working Year

The 2 million longer-term workers averaged 136 days of farm work at \$5.85 per day, not including board, room, and other extras sometimes provided by farmers in addition to cash wages.

About 1 in 4 of these workers also had earnings from nonfarm jobs. Work on farms was the chief activity of just half of those 2 million. Only about 8 percent reported nonfarm work as their chief activity.

Many farm operators worked as hired hands on other farms during 1956. In fact they and their families accounted for about 9 percent of the longer-term workers. About one-third were not in the labor force during the greater part of the year. These were mostly housewives or students.

The average person who spent most of his time doing farm wage work in 1956 worked about 215 days—that's about 36 work weeks on a 6-day basis—and earned about \$6.20 daily. On the other hand, the typical farm worker employed in nonfarm work most of the year put in only 62 days of farm work but he earned \$6.70 per day in farm wages,

The average housewife or student worked on farms about 60 days at \$3.65 a day. The self-employed farmer typically worked only 57 days on other farms at \$6.45 a day.

These wage differences are understandable. Most of the farm work done by housewives and students is parttime, on piece-work jobs where women and youngsters accomplish less than adult males.

Persons who work at nonfarm jobs most of the time probably take farm work only when and where the wages are fairly attractive. Average earnings of regular farm wage workers include some relatively low-paying jobs during slack seasons. Finally, most year-round workers prefer steadier employment at lower wage rates to merely seasonal farm employment at higher earnings.

Farmers employed about 427,000 migratory workers during 1956 for an average of 116 days, compared with an average of 140 days reported by farm laborers who took jobs around their own communities. Migrants earned an average of \$8.05 a day, nonmigrant, \$5.55. In both groups, women averaged considerably less than men.

The farther the migrants traveled to do farm wage work, the higher their farm wage earnings. But in traveling greater distances for greater pay, they averaged less actual work time—12 days a year less in extreme cases.

#### Summer Employment

About half of the entire 1956 farm working force was employed from June through October. A little more than one-fifth was doing such work in January 1956. As would be expected, farm work for migrants showed greater seasonal fluctuation than this. About 60 percent of the migratory workers were employed on farms for wages in July 1956. Peak month for local workers was August, with 54 percent.

About 53 percent of all hired farm workers were eligible for Social Security coverage on the basis of their farm wage work. About 300,000 of those eligible earned less than \$150 in farm wages but qualified under a new provision of the Act.

Sheridan T. Maitland
Agricultural Economics Division, AMS

# Wanted: High Grade Cotton

Current prices favor the production of high-grade cotton on allotted acreages in 1958-59. High grades are commanding substantial premiums. Low grades are heavily discounted.

True, precise measurement of the needs for various qualities of cotton can't be obtained easily, and although mills are now substituting low grades for high, the extent of such shifts cannot be accurately foretold. Yet there can be no doubt that current prices point clearly to strong demands for Strict Low Middling and better grade cotton.

#### Quotations

During the 6 months ended January 1958, Middling 1 inch was quoted at \$18 a bale more than Strict Low Middling 1 inch, and Strict Low Middling 1 inch at \$18 a bale more than Low Middling. The premium for Middling over Strict Low Middling was double the 1951-55 average in the 14 USDA designated markets.

Farmers usually plant the most promising varieties of cotton they know about and use harvesting methods that produce as much high quality cotton as they think practicable. The variety of cotton planted largely determines the length, strength, and fineness of staple. It determines the grade only to a limited extent.

Good progress has been made in recent years in developing and distributing high yielding, strong and longer fibered varieties of cotton. The staple length of cotton is gradually increasing.

The tensile strength of United States cotton has increased some 10 percent in the last decade. In recent years, fiber imperfections, such as neps, are fewer.

Every cotton farmer, of course, would like to be able to produce nothing but Strict Middling Cotton. Failing that, he would settle for Middling cotton. He knows that high grades can mean money premiums for him.

However, the grade of cotton produced, as every grower knows, is not exactly a matter that the grower can control. Weather has a great deal to say about the grade of the cotton as well as the size of the yield.

The costs of harvesting by various means must be balanced against the prospective returns from using such methods. Getting pickers is often a problem. Poor or improper ginning, drying, and cleaning may damage the cotton at the gin. The planting-seed of the farmer's choice may be scarce this season because of seed damage the previous season.

Spokesmen for domestic spinners are urging that extraordinary measures be taken to insure production of more high-grade cotton. At the same time, mills are doing all they can to balance supplies by substituting low grades for high, whenever flexibility of manufacturing will permit. Prices, after all, speak as loudly to the spinners as they do to the growers.

One threat, however, to the farmer's cotton market is the possibility that synthetic fibers may be used more extensively in competition with the relatively scarce high grades of cotton. The spinner may be tempted to use rayon as well as heavily discounted low grades of cotton. This is serious for the grower, for markets lost by cotton because of shifts to synthetics are difficult to recover.

# Time for Reappraisal

So, in this critical year 1958, with the proportions of lower grades in stocks exceptionally high and discounts large, it isn't a bad idea, maybe, to take a careful survey of the situation.

You, as a grower, surveying the entire current picture may come to the conclusion that it would pay you to take a careful look at the price premiums offered for the better grades of cotton compared with the lower grades.

Rodney Whitaker
Deputy Director, Cotton Division, AMS

# TOBACCO PRODUCTION IS DOWN

In recent years, tobacco growers have faced a paradoxical situation. The amount of leaf going into manufactured tobacco products has declined steadily, although use of cigarettes and cigars has continued to rise and exports have stayed fairly stable.

As a result, the crop this year probably will be held to the smallest figure since 1943. It is hoped that the reduction will help cut down the large carryovers from previous crops.

#### **Record Use of Cigarettes**

Cigarette consumption last year was a record high and cigar use the highest since 1930. Manufacture of cigarettes for domestic and military use in 1957 totaled 421 billion. An additional 21 billion were shipped to foreign countries and U. S. possessions overseas. Total output at 442 billion was 4 percent higher than in 1956.

Output of cigars and cigarillos for domestic and military use, at 6.2 billion, was nearly 3 percent above that of 1956. Exports account for but an insignificant portion of the total cigar output.

Despite these gains in the manufacture of both cigarettes and cigars, total leaf used for both stayed just about even with 1956 figures and considerably below those for 1952. In that year, manufacturers used 100 million pounds more leaf in cigarettes and about 10 million pounds more in cigars.

Filter tip cigarettes generally require less tobacco per cigarette than the non-filter tips. Likewise, the increased proportion of cigarillos and small cigars in total cigar output is partly responsible for 1957's reduced tobacco requirements in those products.

The increasing use of sheet tobacco in both cigarettes and cigars enables manufacturers to utilize stems and fragments of tobacco leaves formerly considered unsuitable. The declining use of other tobacco products also has reduced the quantity of leaf required. Pipe smoking and chewing tobacco have

lost popularity steadily and in the last 2 to 3 years, use of snuff, stable for many years, has also declined. Use of smoking tobacco, however, turned upward moderately in the latter half of 1957.

Faced with this decreasing use of leaf tobacco by manufacturers, tobacco growers, in 1958, for the second year in a row, will hold production of most kinds of tobacco well below that of other years since 1943.

This will be done because carryovers from previous crops are large. The 1957 tobacco crop was more than one-fifth below the previous 10-year average. Production in 1958 also will fall at least this much below the 1947-56 average, if yields per acre are about the same as in recent years.

Flue-cured and burley—the major cigarette tobaccos—as well as most other kinds have been under marketing quotas and acreage allotments for several years. Growers have kept these quotas in effect by voting overwhelmingly in favor of them at periodic referendums.

About 96 percent of the growers of fire-cured and dark air-cured tobacco who voted in February favored quotas on their next 3 crops. Before the 1959 crops are planted, there will be referendums on flue-cured, burley, Virginia sun-cured and Maryland tobacco (Type 32). Growers of these kinds of tobacco will decide whether to continue quotas on their 1959-61 crops. Approval by at least two-thirds of those voting is necessary if the quotas are to remain in effect.

# **Acreage Allotments**

The U.S. Department of Agriculture set 1958 acreage allotments at about 1957 levels for flue-cured, burley, Maryland, Virginia sun-cured, and the Ohio filler and Wisconsin binder to-baccos. Allotted acreage for fire-cured, dark air-cured, and Connecticut

Valley binder tobaccos are about 10 percent less than in 1957.

As was the case last year, 1958 acreage will also be affected by the number of allotted acres placed in the Soil Bank. For some kinds, especially Connecticut Valley cigar binder types, the Soil Bank program has meant a significant reduction.

#### March Intentions

According to farmers' intentions on March 1, 1958, flue-cured acreage will be 35 percent below the 1952–56 average and the smallest in 27 years. Burley acreage (cut sharply in 1955 and held at the reduced level since) is indicated at 37 percent below 1950–54. Maryland acreage may be a fourth below 1952–56 and Virginia sun-cured down about a fifth.

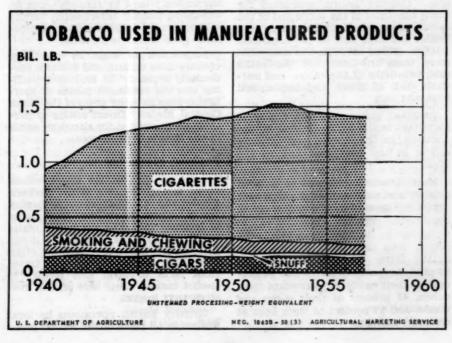
Fire-cured and dark air-cured tobacco growers plan to set 16 and 13 percent less acres than last year and around 37 percent less than 1952-56. Connecticut Valley cigar binder acreage probably will be only a fourth as much as 1952-56. A drastic cut occurred from 1955 to 1957 and an additional 29-percent cut is in prospect for this year.

Ohio cigar filler and Wisconsin cigar binder growers have indicated that the 1958 acreage will be 17 percent less than in 1952-56. Pennsylvania cigar filler growers intend to plant approximately the same acreage as they averaged in the 1952-56 period.

Prospective acreage of the cigar wrapper types is a little below that of last year and the 1952-56 average. The Pennsylvania filler tobacco does not have a marketing quota and the cigar wrapper types are not covered by the marketing quota law.

Prices of the kinds of tobacco under marketing quotas are supported at 90 percent of parity, except for fire-cured, dark air-cured, and Virginia sun-cured. For these latter types, price supports are based on fixed percentages of the burley support. However, beginning with 1958, they may not exceed their 1957 levels unless 90 percent of their own parities is above these levels.

Arthur G. Conover Agricultural Economics Division, AMS



# Where Does Your Livestock Go?

In 1955, United States farmers sold 38 percent of their livestock in the country at points other than terminal and auction markets. This total was made up of farmers' sales direct to packers (15 percent), to local dealers (15 percent), and to other farmers (8 percent).

Terminal public markets accounted for 34 percent of all farmers' livestock sales; auctions, 26 percent, "all other" outlets, 2 percent.

#### **Auctions Increasing**

Terminal markets were still the largest single outlet in 1955 but auction sales have increased rapidly and now rank second as a single outlet. However, relative importance of the outlets varies by species and regions.

Thus, in 1955, farmers marketed 38 percent of their cattle, 22 percent of their calves, 35 percent of their sheep and lambs, and 31 percent of their hogs and pigs through terminal public markets. Country selling accounted for about one-third of the cattle and of the calves, almost half of the sheep and lambs, and over half of the hogs sold. Auction selling amounted to somewhat more than one-fourth of the cattle sold, two-fifths of the calves, and one-sixth each of sheep and lambs, and hogs and pigs.

Terminal public markets are most important in the North Central States, auctions in the South, and country selling in the Northeast and in the West.

Much livestock disposed of at both country and auction markets is not for immediate slaughter. Consequently, in considering merely final sales to slaughterers, terminal markets rank higher than they do in original sales at the farm. In 1956, federally inspected slaughterers purchased 70 percent of their cattle, 37 percent of their calves, 45 percent of their sheep and lambs, and 37 percent of their hogs at terminal markets.

Since World War I, terminal markets have actually declined in relative importance. In 1923, for example, federally inspected slaughterers' purchases at terminal markets were 90 percent of their total kill of cattle, 86 percent of calves, and sheep and lambs, and 77 percent of hogs.

A number of factors helped to spur the rapid growth of country selling which began in the 1920's largely at the expense of terminal markets. Direct sale by producers also had this appeal, that it permitted producers to observe and exercise some control over selling while it was taking place. Many producers preferred this rather than shipping to distant markets. If the market price was too low, they could refuse to sell, but the return haul would cost too much.

Larger and more specialized livestock farmers could now move their stock in any direction along modern transportation networks. Improved communications—the radio, the telephone, both increasingly used by farmers—and an expanded market information service all encouraged country selling, particularly sales direct to packers.

Disposition of hogs by direct or country sales became and remains particularly popular. In 1955, direct selling was the dominant means of marketing hogs in many areas of the North Central States. Direct selling is particularly important for slaughter cattle in the Pacific Coast States.

#### Packers' Plants

Some of the packers buy livestock direct from producers at the packers' plants and at their country buying points. These points have fixed places of business including yards and scales where the livestock is delivered direct by farmers. Cattle especially are often bought by packer-buyers who travel from farm to farm and feedlot to feedlot making their bids on the livestock they inspect.

Country buying operations by local dealers in all parts of the Nation prob-

ably run into the tens of thousands of deals every year. These include purchases by local buyers, by contract buyers for later delivery, and by buyers purchasing on order from others.

Some of these country buyers purchase livestock at fixed establishments similar to packer-owned country buying points. In the 1930's came the intensive growth of livestock auction outlets, one of the most dynamic changes in the livestock marketing system during the last several decades. In contrast to the terminal markets, auction markets draw their supplies largely from the communities in which they are located. Most animals are brought by farmers or dealers to the auction market.

#### **Auction Procedure**

Other names for livestock auctions are sales barns, livestock auction agencies, community sales, and community auctions. The procedure, however, is always the same: sale to the man offering the highest price per cwt. or per head during public bidding.

Only about 200 auctions were in operation in 1930 but by 1937 this number had spurted to 1,345. Another count showed 2,472 in 1949. The peak came in 1952, with over 2,500 auctions. The 1955 count showed a slight decline to 2,322.

What is the best market for you? You would have to evaluate each possible market in terms of services offered, selling costs, competitive prices, and from all this determine what your net return is likely to be.

Even after you've reached a decision, the only certain thing about it is that it will change. Price shifts at different markets do not occur simultaneously or in the same amount or even in the same direction.

This, though, is heartening to you as a producer. Marketing always has been and probably always will be dynamic. Marketing opportunities and outlets will change but a variety of marketing opportunities will always be available to you.

Victor B. Phillips Gerald Engelman Marketing Research Division, AMS

# Early Lamb Crop Up 2 Percent

The 1958 early spring lamb crop in the principal early lamb producing States is estimated 2 percent above the 1957 crop, according to the March report of the Crop Reporting Board.

The increase is due to a larger number of breeding ewes and a higher lambing percentage—that is, lambs saved per 100 ewes. The estimated percentage of ewes lambing early in these States is the same as last year.

The increase in the number of early lambs is accounted for by increases in Texas, the leading lamb producing State, and the Pacific Northwest. The number of breeding ewes on farms and ranches January 1, 1958, was above the previous year in 6 of the 10 important early lamb States: Kentucky, Tennessee, Texas, Idaho, Washington, and Oregon. The other early lamb States are Missouri, Virginia, Arizona, and California.

In general, weather and feed conditions have been favorable for the growth and development of the early lamb crop, except in the Southeastern States. There persistent below-normal temperatures prevailed and supplemental feeding was required.

#### Texas Lambs

An early lamb crop much larger than last year's relatively low spring crop seems indicated in Texas. The number of breeding ewes is up 1 percent and the lambing percentage will be higher. Indications also point to a higher percentage of ewes lambing early than in recent years. Spring range and pasture feed prospects are unusually favorable.

An increase in the early lamb crop appears likely, also, in the 3 Northwestern States, Idaho, Washington, and Oregon. The number of breeding ewes is up 4 percent and the proportion of ewes lambing early is about the same.

Emmett B. Hannawald
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# **Briefing for Potato Growers**

Potato production since 1935 has had 3 main characteristics. They are: Drastic reduction in acreage, phenomenal increase in yield per acre, maintenance of volume of production at a relatively high level.

In 1935 about 3.5 million acres of potatoes were harvested. In 1957 the acreage was less than 1.4 million. In 1935 yield per harvested acre was 65.5 cwt. In 1957 it was 171.9.

#### **Production Contrasts**

At the beginning of the period 1935–56, production averaged around 213 million cwt. In 1943–50, when wartime incentives and price supports were stimulating factors, production reached an all-time high of 292 million cwt. and averaged 257 million. During 1951–56, years without price supports, production averaged 221 million cwt. with a high of 244 million in 1956. The 1957 crop was 236 million cwt., considerably above the 1951–56 average.

The greatest upsurge in per-acre yield came in 1946-50 when prices were supported at 60-90 percent of parity and growers were obliged to comply with Government acreage allotments to receive payments. Harvested acreage declined 36 percent, but yield per acre rose 63 percent.

Now, why did the yield per acre increase so substantially?

There are several reasons. They include a reduction in low-yielding acreage. Concentration of production on specialized potato farms. Improved cultural practices. Discontinuance, by many growers, of production primarily for home use.

This last factor shows up in the steady decline in the number of farms growing potatoes. They decreased from 3.1 million in 1934 to 1.4 million in 1954. The 1950 Census of Agriculture showed that 82 percent of the 1949 crop was produced on only 30,789 farms that grew 10 acres or more. In 1954, the 24,674 farms reporting 10 acres or

more of potatoes accounted for 88 percent of the production.

The reduction in marginal and noncommercial acreages resulted in a larger part of the crop being grown on the fertile, higher-yielding soils. This, then, would be still another reason why yield per acre should increase.

The improved cultural practices include wider use of improved varieties and certified seed, the planting of more seed per acre, heavier applications of fertilizer per acre, and the more frequent use of potent insecticides and fungicides.

All these devices were used whengrowers were assured 60 to 90 percent of parity. Beginning with 1951, when price supports were removed, per acre yields leveled off and remained fairly stable until 1955. However, in 1957 yields again showed a substantial increase over the 1950-55 level.

Yields in the Central States, considering the late potato crop (late summer and fall crops combined), have not shown as relatively large increases as in the Eastern and Western States. This factor and the decline in acreage in the Central States account for the relatively large reduction of production for that area.

# **Production By Regions**

The Central States lost the production leadership of the late crop to the other two areas, with the Eastern and Western regions each producing, for the period 1950 to 1955, 38 percent of the total late summer and fall crops. During the same period, the acreage was divided almost equally among the three regions.

The late summer and fall crops are used as the basis of comparison because they produce about three-fourths of the annual supply.

The maintenance of production at a high level does not explain all the problems confronting potato producers in recent years. With the decline in the number of farms and the largest proportion of production now coming from growers having 10 acres or more, a larger percentage of the production is being grown for sale. As recently as 1940, only 67 percent of the total crop was sold. During 1952-56, sales have averaged over 84 percent.

The larger quantities now being sold are increasingly finding their way into new outlets. The quantity processed for food increased from 2.1 percent of total sales in 1940 to 12 percent in 1956. Potatoes are no longer used for the manufacturing of alcohol, but livestock feed is an important nonfood outlet.

While 1957 production of fall potatoes was above average, storage holdings on February 1, 1958, were 4.9 million cwt. below average. The 1958 winter crop, forecast at 5.0 million cwt. on February 1, is about 1.2 million cwt. above average. Growers of early spring, late spring, and early summer potatoes have reported intentions to

plant 308,000 acres or 11 percent below average.

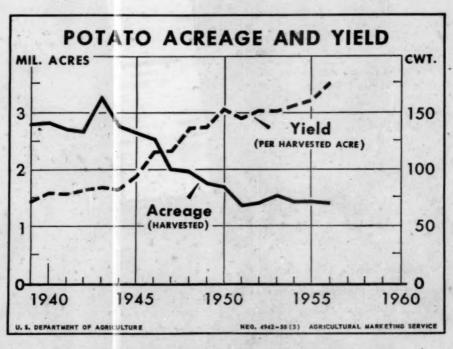
If the present tendency of growers in specialized and high yielding areas to maintain present acreage is continued, future crops may be expected to be too large to be marketed at a profit.

#### Crops and Income

Large potato crops usually bring growers a smaller gross income than small crops. For example, sales from the crop of 220 million cwt. in 1954 were valued at \$395 million compared with only \$252 million from the moderately larger crop of 232 million cwt. in 1953.

Acreage-marketing guides, published by the U. S. Department of Agriculture, can be used by growers in planning an acreage that, under average conditions, will more nearly strike a balance between production and demand.

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Farmer's Share of Consumer's Food Dollar

January 1957	40	percent
December 1957	41	percent
January 1958	40	percent

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